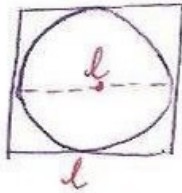


5



ex. 13.1

$$r \text{ of h.s.} = \frac{l}{2}$$

area of remain.
portion

$$= \text{S.A of cube} + \text{CSA of h.s.} \\ - \text{area of h.s. base}$$

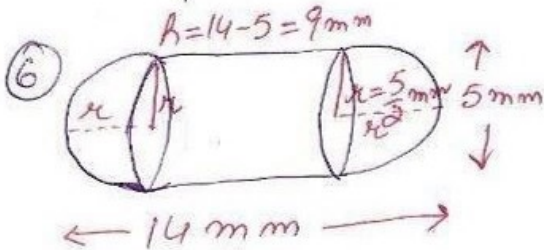
$$= 6e^2 + 2\pi r^2 - \pi r^2$$

$$= 6e^2 + \pi r^2$$

$$= 6 \times l^2 + \pi \times \left(\frac{l}{2}\right)^2$$

$$= l^2 \left(6 + \frac{\pi}{4}\right)$$

$$= \frac{l^2}{4} (24 + \pi) \text{ Sq. units}$$



Surface area
of capsule

$$= \text{CSA of 2 h.s ends} \\ + \text{CSA of cylinder.}$$

$$= 2 \times 2\pi r^2 + 2\pi rh$$

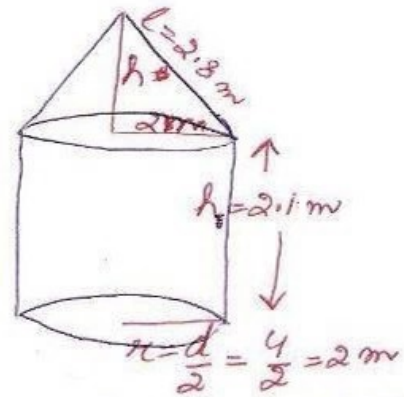
$$= 2\pi r(2r + h)$$

$$= 2 \times \frac{22}{7} \times 5 \left(2 \times \frac{5}{2} + 9\right)$$

$$= \frac{110}{7} \times 14^2$$

$$= \frac{110}{7} \times 196 \text{ cm}^2$$

7



area of canvas used
= CSA of cone + CSA of cyl

$$= \pi rl + 2\pi rh$$

$$= \pi r(l + 2h)$$

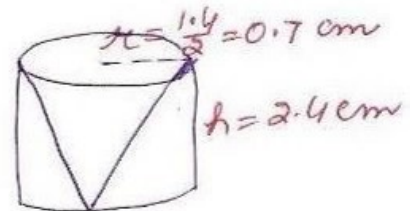
$$= \frac{22}{7} \times 2 (2.8 + 4.2)$$

$$= \frac{44}{7} \times 7$$

$$= 44 \text{ m}^2$$

$$\text{Cost} = 44 \times 500 \\ = \text{Rs } 22000$$

8



$$l = \sqrt{r^2 + h^2}$$

$$= \sqrt{0.7^2 + 2.4^2}$$

$$= \sqrt{6.25} = 2.5 \text{ cm}$$

total surface area
of solid

$$= \text{CSA of cyl.} + \text{CSA of cone} \\ + \text{area of base}$$

$$= 2\pi rh + \pi rl + \pi r^2$$

$$= \pi r(2h + l + r)$$

$$= \frac{22}{7} \times 0.7 (4.8 + 2.5 + 0.7)$$

$$= \frac{22}{10} \times 8$$

$$= 17.6 \\ = 18 \text{ cm}^2$$